Highlights

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Washington SCIENCE TRENDS

THE WHITE HOUSE has turned a deaf ear to proposals that the highly effective President's Committee on Scientists and Engineers be continued as a permanent organization. The Committee was formed in April, 1956 to spur interest in scientific and technical education and effective use of manpower.

The Committee will now have to close up shop in December and hope that other governmental or private organizations will take over some of its program. However, some of the agencies mentioned have resented the Committee's status as a threat to their own operations. Therefore, it seems likely that much of the program will be buried without ceremony.

<u>President Eisenhower</u> has also abandoned last year's highly-publicized formal reception and dinner for the nation's leading scientists. That affair is notably missing from the new White House social calendar.

Presidential Assistant Dr. J.R. Killian, who apparently had a hand in both decisions, continues to build up his own staff. His office and its Science Advisory Committee, have already grown to more than 50 scientists and engineers and there are signs of further expansion. "More and more," Dr. Killian states, "our offices serve as a central rallying point and communications center for the civilian scientific community."

WATCH FOR These Actions From The Killian Group:

- * A new study of the responsibilities of the Federal government in coordinating the nation's efforts in "acquiring, publishing, translating, abstracting, storing, retrieving and disseminating scientific and technical information."
- * A new report aimed at "clarifying and highlighting" the aims and needs of U.S. education in the field of science and engineering.
- * Recommendations for improvement of research management in the Federal Government, including proposals for new funds and emphasis in such fields as meteorology, geology, geophysics, oceanography, and studies of the upper atmosphere and combustion.

How does the Killian office function? It has <u>no operational responsibility</u> in Federal science programs. Here is how the <u>President's Special Assistant defines his role:</u>

"My function, and that of the committee is to provide answers to questions raised by the President, to undertake assignments for him of an advisory kind, to mobilize the best scientific advice in the country, and to make recommendations to him...."

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PRESIDENT EISENHOWER may soon be called upon to arbitrate the increasingly bitter dispute over the power of the National Aeronautics and Space Administration to "raid" the armed services for technical manpower and facilities in connection with its spaceflight programs. The split is far deeper than has been generally reported.

Navy is already losing 150-200 of its Vanguard Team to the NASA and the Air Force is fighting behind the scenes to keep its aeromedical facilities intact. Army is fighting a lonely battle to retain its Redstone Arsenal organization and its affiliated Jet Propulsion Laboratory.

A Military-Civilian liaison committee is, by law, supposed to arbitrate these disputes and insure that military programs are not hampered by civilian "blue sky" ventures. However, the committee is yet to be named. Acting Defense Secretary Donald Quarles is reliably reported to have relegated the liaison group to much lower advisory status, to the distaste of the three services. If and when the committee is established its chairman is likely to be Paul A. Smith of the Advanced Research Projects Agency, a former guided missile consultant to the Department of Defense.

HOUSE SPACE COMMITTEE staff today called upon the United States to take the lead in forming a new international astronautical organization to prevent a world-wide military race to dominate outer space developments. Here are specific suggestions in the report:

* The new space agency (NASA) should consider establishing some form of permanent liaison facilities devoted to the encouragement of cooperative arrangements with other countries.

* NASA should strive to catalog on a comprehensive scale the work

projects and talents of teams and individuals, at home and abroad.

* NASA should consider the establishment in this country of facilities for the evaluation of foreign proposals and should develop specific plans for exchange of scientific personnel among countries willing to cooperate.

* Congress should consider backing an expansion of training facilities in the space sciences, including opportunities for foreign students

to compete for fellowships.

(Complete report, based on study tours and conferences here and overseas, available upon request from House Committee on Astronautics and Space Exploration, New House Office Building, Washington, D. C.)

A "safer" sulfonamide and an antibiotic which shows some promise in cancer cases were two highlights of an antibiotic symposium which ended here Friday. The sulfa drug (Madribon-Roche Laboratories) is used in small, inexpensive doses. Suggestions were made that it might be stockpiled for use in civil defense and by the military....Long clinical trials lie ahead for a Japanese-bred antibiotic, mitomycin-C, which appears to have tumor-inhibiting properties. Bristol Laboratories, Inc., Syracuse, N.Y. is the producer.

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NUCLEAR SURFACE TANKER, using a boiling water reactor system, now being viewed with enthusiasm by Maritime Administration officials. They point to these major advantages: weight reductions can be fully converted to cargo capacity; cargo can be used for shielding; and long trade routes and short "turnarounds" provide the most effective use of a nuclear power plant.

Research and Development program is now underway to investigate potentials of a gas-cooled, closed-cycle turbine concept. If this approach seems justified a prototype could be operating by 1963-64.

Here's an official estimate of the <u>competitive possibilities</u> of nuclear ships: "Capital cost for specific applications should compare favorably with that of a conventional ship during the 1965-1970 period. If this expected trend materializes, the nuclear plant should be in competition with conventional ship's machinery before 1970."

ATOMIC DEFENSE plans include proposals for inclusion of an inexpensive radiation meter in the new transistorized radios which are becoming increasingly popular with the public. The government is urging radio manufacturers to include the devices as "a service to the country". There are also plans in the works to provide such meters for M.D.'s -- and public health authorities are being sounded out on proposals for supplying doctors with lead-shielded automobiles which could be used to visit and treat patients in highly contaminated areas following an atomic attack.

Research experience for science teachers will be aided by the National Science Foundation. Up to 700 teachers will work as summertime aides in non-profit laboratories...NSF also stepping up its program to train teachers for traveling science demonstration programs. (Details from Special Projects in Science Education, National Science Foundation, Washington 25, D. C.)

Coast and Geodetic Survey has succeeded in harnessing the proton of a hydrogen atom to measure the vertical and horizontal components of the earth's magnetic field. A newly devised "Proton Vector Magnetometer" will be used for magnetic observations and oil and oceanographic investigations. (Details from Geophysics Division, Coast and Geodetic Survey, Washington 25, D.C.)

NEW FACES: Col. Benjamin G. Holzman will become Commander of the Air Force Office of Scientific Research Oct. 31, succeeding Brig. Gen. H.F. Gregory, who is retiring...Maj. Gen. Leighton I. Davis becomes Air Force Deputy Commander for Research. Brig. Gen. Ralph L. Wassell will head Applied Research and Col. Lester M. Taylor becomes Assistant Deputy Commander for Research Operations...At the National Institutes of Health, Dr. C.J. Van Slyke becomes Director, Dr. Kenneth M. Endicott becomes an Associate Director and Richard L. Seggel becomes NIH Executive Officer.

THE CHECKLIST

- () <u>Missile-Aircraft Flight Testing</u> and the problems of data transmission are surveyed in research studies aimed at improved quality transducers, which convert measurement of mechanical qualities into electrical signals. Free. (Write National Bureau of Standards, Office of Technical Information, Washington 25, D.C.)
- () <u>Nuclear Process Heat</u> in industry surveyed in new report recommending a major effort to develop special purpose reactors. Of interest to food, paper, chemical, rubber and petroleum industries. 44 pages, \$1.25. (Write National Planning Association, 1606 New Hampshire Ave., N.W., Washington 6)
- () <u>Lunar Probe</u> fact sheets include information on launching vehicle, tracking and communications, contractor participation and data on the moon. (Write Office Of Information Services, HQ, ARDC, Patrick Air Force Base, Fla.)
- () <u>Radioactive Fallout</u> and its medical implications surveyed in a speech-report prepared by Dr. Willard F. Libby. 16 pages. Free. (Write AEC, Washington 25, D.C. Att: Information Services, for "Radioactive Fallout and Medicine.")
- () <u>Nuclear Merchant Marine</u> prospects and plans surveyed in a speech-report by E. Kemper Sullivan, Deputy Nuclear Projects Officer. (Write Office of Information, Maritime Administration, Washington 25, D.C.)
- () <u>Guide to Russian Medical Literature</u> lists 137 medical journals and describes translation services and sources in special subject areas, 90 pages, 40¢. (Write Superintendent of Documents, Government Printing Office, Washington 25, D.C. for Publication No. 602, Public Health Service)
- (Single copies of the following newly-printed documents are available without charge upon written request to the House Committee on Government Operations, 1501 New House Office Building, Washington, D.C.)
- () Research and Development, (Office of the Secretary of Defense provides an outstanding summary of R&D programs and policies at the Pentagon. 218 pages. Ask for House Report No. 2552.)
- () Atomic Shelter Program, a report on civil defense implications of nuclear tests and a plea for action. 22 pages. Ask for House Report No. 2554.
- () Rocket Launcher Procurement, a guided tour through the jungle of government contracting. 108 pages. Ask for House Report No. 2660.
- () <u>Saline Water</u> conversion for human and agricultural use. A survey of R&D programs in and out of government. House Report No. 2551, 30 pages, and Saline Water Hearings, 366 pages.
- () Federal Role in Aviation, a report on air traffic control and navigation, 27 pages. Ask for House Report No. 2679.
- () Advertising of products with medical implications. Ask for Reports No. 2553 (Weight Reducing Remedies), 2667 (Dentifrices) and 2668 (Prescription Tranquilizing Drugs)

